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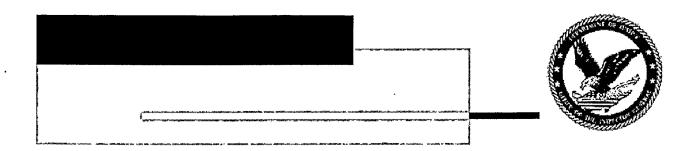
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# INTERIM REPORT ON THE DEPARTMENT OF JUSTICE'S USE AND SUPPORT OF UNMANNED AIRCRAFT SYSTEMS

U.S. Department of Justice
Office of the Inspector General
Audit Division

Report 13-37 September 2013<sub>R</sub>

# INTERIM REPORT ON THE DEPARTMENT OF JUSTICE'S USE AND SUPPORT OF UNMANNED AIRCRAFT SYSTEMS

#### **EXECUTIVE SUMMARY**

The Department of Justice Office of the Inspector General (OIG) is conducting an audit of the domestic use of unmanned aircraft systems (UAS) by the Department of Justice (DOJ), commonly referred to as unmanned aerial vehicles or "drones," as well as its support and provision of UAS to other law enforcement agencies and non-profit organizations. This interim report presents an overview of DOJ's UAS use and policies as of May 2013.

As of May 2013, four DOJ law enforcement components had either tested for evaluation or used UAS to support their operations. Although the Federal Bureau of Investigation (FBI) is the only DOJ component to have used UAS to support its mission, the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) reported to us that it plans to deploy UAS to support future operations. The Drug Enforcement Administration (DEA) and the United States Marshals Service (USMS) have acquired UAS for testing, but told us that they have no plans to deploy them operationally. Specifically, the DEA stated that it plans to transfer its UAS to another federal agency, while the USMS stated that it plans to destroy its UAS because its UAS are obsolete and no longer operable. From 2004 to May 2013, DOJ law enforcement components reported spending in total approximately \$3.7 million on UAS, with the FBI accounting for over 80 percent of this amount.<sup>2</sup>

In addition, the Office of Justice Programs (OJP) and Office of Community Oriented Policing Services (COPS) have provided \$1.2 million in funding to seven local law enforcement agencies and non-profit organizations to purchase UAS for testing or use.

The UAS known to have been purchased or funded by DOJ have been what the Federal Aviation Administration (FAA) defines as "small UAS,"

<sup>&</sup>lt;sup>1</sup> UAS are remotely piloted aerial vehicles and their associated ground control stations.

<sup>&</sup>lt;sup>2</sup> Total expenditures associated with UAS acquisition include costs for: (1) the vehicles, (2) mission payloads, (3) ground control station, (4) control and data links, and (5) manufacturer-provided training. As of May 2013, the FBI had spent over \$3 million on UAS activities, the ATF almost \$600,000, and the USMS \$75,000. The DEA acquired research UAS from another federal agency at no cost.

which weigh up to 55 pounds. DOJ officials told us that none of their UAS are armed or carry releasable projectiles.

## **Need for UAS-Specific Policies**

While both the FBI and ATF have developed procedures guiding how to receive approval to operate UAS, officials with both components told us they did not believe that there was a need to develop specialized UAS privacy protocols. During our review, FBI and ATF officials stated that they did not believe there was any practical difference between how UAS collect evidence through aerial surveillance as compared to manned aircraft. Consequently, we found that the FBI has been applying its existing aerial surveillance policies to guide how agents should use UAS. ATF officials told us that, as of May 2013, the ATF was developing a standard operational checklist to guide how its agents should use UAS.

However, we found that the technological capabilities of UAS and the current, uncoordinated approach of DOJ components to UAS use may merit the DOJ developing consistent, UAS-specific policies to guide the proper use of UAS. Unlike manned aircraft, UAS can be used in close proximity to a home and, with longer-lasting power systems, may be capable of flying for several hours or even days at a time, raising unique concerns about privacy and the collection of evidence with UAS. Considering that multiple DOJ components are using or have the potential to use UAS, we believe the Office of the Deputy Attorney General (ODAG), which has responsibility within DOJ for formulating cross-component law enforcement policies, should consider the need for a DOJ-wide policy regarding UAS uses that could have significant privacy or other legal implications.

# **Need for Enhanced UAS Award Coordination and Oversight**

Both OJP and COPS need to enhance their efforts to monitor UAS awards and improve coordination between award recipients with DOJ-funded UAS and DOJ law enforcement components. Specifically, neither OJP nor COPS required that UAS award recipients demonstrate that they could receive FAA approval to operate UAS or that UAS use was legal in their jurisdiction. Their UAS awards also did not require recipients to report specific data necessary to measure the success of UAS testing, or to use or share the results of their programs with DOJ. Although UAS supported by DOJ award funds have the potential to be deployed in ways that may interfere with ongoing DOJ law enforcement surveillance efforts, we found no evidence that OJP or COPS coordinated with or notified DOJ law enforcement components about their UAS awards, either before or after the awards were made.

Moreover, we note that OJP had difficulty confirming to us how many UAS-related awards it had made.<sup>3</sup> OJP reported that in response to our preliminary inquiries it did not uniformly search its award tracking system, and as a result it reported to us its UAS research awards but not the awards it had made to local police departments for UAS acquisition. Only after the OIG identified two UAS awards to local police departments did OJP perform a more complete search of its grants system and confirm these two OIG-identified awards and a third UAS award.

This interim report provides eight recommendations to DOJ to improve coordination among law enforcement and award-making components, and to facilitate the drafting of policies that protect individual privacy interests and ensure the admissibility of UAS-collected evidence in legal proceedings.

<sup>&</sup>lt;sup>3</sup> Because of this difficulty, we believe we cannot rule out the possibility that additional DOJ grant recipients could have used DOJ funds to purchase UAS.

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# INTERIM REPORT ON THE DEPARTMENT OF JUSTICE'S USE AND SUPPORT OF UNMANNED AIRCRAFT SYSTEMS

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# INTERIM REPORT ON THE DEPARTMENT OF JUSTICE'S USE AND SUPPORT OF UNMANNED AIRCRAFT SYSTEMS

The Department of Justice Office of the Inspector General (OIG) is conducting an audit of the domestic use of unmanned aircraft systems (UAS) by the Department of Justice (DOJ), as well as its support and provision of UAS to other law enforcement agencies and non-profit organizations. UAS are also commonly referred to as unmanned aerial vehicles (UAV) or "drones." This interim report presents an overview of DOJ's UAS use and policies as of May 2013.

#### Introduction

As of May 2013, six DOJ components have acquired UAS or awarded funds for UAS testing or use, but only the Federal Bureau of Investigation (FBI) has used UAS to support its mission. The Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) reported to us that it plans to deploy UAS to support future operations. The Drug Enforcement Administration (DEA) and the United States Marshals Service (USMS) have acquired UAS for testing but told us that they have no plans to deploy them operationally. In addition, the Office of Justice Programs (OJP) and Office of Community Oriented Policing Services (COPS) have provided funding to local law enforcement agencies and non-profit organizations to purchase UAS for testing or use.

The UAS purchased or funded by the DOJ as of May 2013 have been what the Federal Aviation Administration (FAA) defines as "small UAS," which are UAS weighing up to 55 pounds. Many officials from DOJ, other federal agencies, and local law enforcement stated that they believed small UAS can be beneficial for reconnaissance, surveillance, and crime scene examinations, and that their use eliminates the need to risk the life of a pilot.

To obtain information on the acquisition, use, and control of UAS, we reviewed relevant federal policies and procedures, and we interviewed officials across the DOJ as well as officials and UAS operators at local and non-profit organizations that received DOJ UAS awards. We also spoke to officials at other organizations that we believed have important UAS roles, responsibilities, or viewpoints regarding law enforcement's use of UAS

<sup>&</sup>lt;sup>4</sup> UAS are remotely piloted aerial vehicles and their associated ground control stations.

technologies. Generally, this review covers the period from when the DOJ began acquiring UAS in 2004 until May 2013.

## **Regulatory Environment**

The FAA is responsible for establishing rules governing the safety of the national airspace. The FAA Modernization and Reform Act of 2012 (Act) requires the FAA to expedite its review of applications from public agencies to operate UAS and to develop a comprehensive plan to integrate UAS into the national airspace system.<sup>6</sup> Under the Act, the FAA must allow government public safety agencies to use UAS weighing up to 4.4 pounds so long as they are deployed: (1) within line of sight of the operator; (2) less than 400 feet above the ground; (3) during daytime; (4) inside uncontrolled (Class G) airspace; and (5) more than five miles from any airport or other location with aviation activities, such as heliports.<sup>7</sup> The FAA subsequently permitted public UAS with weights of up to 25 pounds to operate under the same conditions.

Before any public agency can operate a UAS, the FAA requires it to apply for and receive a Certificate of Waiver or Authorization (COA) from the FAA. In its application, the public agency must demonstrate the measures it has taken to enable it to operate the UAS safely. Each COA lasts for up to 2 years and defines the operational conditions, emergency landing procedures, airworthiness requirements, area of operations, and ground crew proficiency required to operate the UAS. According to the FAA, these elements are necessary to ensure that UAS operators will be able to "see and avoid" other air traffic and be aware of the operating environment while the UAS is in the air. A public agency requesting a COA generally has to demonstrate that it will have trained line-of-sight visual observers

<sup>&</sup>lt;sup>5</sup> Specifically, we spoke with officials from: (1) the FAA's Unmanned Aircraft Systems Integration Office and its Office of General Counsel; (2) the Association for Unmanned Vehicle Systems International, a non-profit organization that seeks to promote and support unmanned systems and robotics; (3) the International Association of Chiefs of Police (IACP), a non-profit organization that seeks to improve law enforcement practices worldwide; and (4) the American Civil Liberties Union, a non-profit organization whose stated mission is to protect individual rights and liberties.

<sup>&</sup>lt;sup>6</sup> 49 U.S.C. § 40101 (2012).

<sup>&</sup>lt;sup>7</sup> The FAA defines "Class G" airspace as uncontrolled airspace and generally extends up to 1,200 feet above ground level.

<sup>&</sup>lt;sup>8</sup> 14 C.F.R. § 91.113 (2012).

overseeing the UAS or an "alternate method of compliance" to meet the seeand-avoid requirement.9

The FAA may issue an emergency COA to a law enforcement agency to operate a UAS outside of an approved area. The FAA only issues an emergency COA if: (1) there is a situation with an extreme possibility of the loss of life, (2) the proposed UAS already is operating under an approved COA, and (3) the agency is unable to use a manned aircraft to respond to the emergency.<sup>10</sup> Additionally, although the FAA generally limits UAS use to less-densely populated areas and during daytime, the FAA may temporarily amend a COA to allow an agency to operate a UAS in populated areas or at night so long as the law enforcement agency proposes to mitigate sufficiently the risk of mid-air collision and injury or property damage on the ground. For example, an agency may mitigate these risks by restricting public access to the area of UAS operation while the UAS is in use.

#### **Issues Regarding Law Enforcement Use of UAS**

Small UAS provide an attractive alternative to law enforcement agencies seeking to establish or augment their aviation capabilities because small UAS have much lower operational and maintenance costs than the manned aircraft typically used by law enforcement. One local law enforcement agency has estimated the cost of using a UAS at just \$25 per hour compared to \$650 per hour for a manned aircraft. In addition, UAS capabilities and supporting technologies are improving. UAS power systems are providing longer flight times, and UAS are being equipped with smaller, more versatile cameras capable of taking both optical and infrared images.

UAS technology improvements and their reduced costs have resulted in questions being raised regarding the potential for routine law enforcement use of UAS and the implications of such use on privacy rights. As of May 2013, Congress has held several hearings and invited testimony from UAS developers, law enforcement users, privacy advocates, and academic experts regarding the proper use and oversight of UAS within the United

<sup>&</sup>lt;sup>9</sup> Such alternate methods may include some combinations of ground-based radar, on-board cameras, or collision-avoidance sensors instead of line-of-sight visual observers. The FAA evaluates alternate methods of compliance for risk on a case-by-case basis. See the Federal Aviation Administration Interim Operational Approval Guidance 08-01 (March 2008).

<sup>&</sup>lt;sup>10</sup> See U.S. Department of Transportation, Federal Aviation Administration, Notice of National Policy, N 8900.207, Unmanned Aircraft Systems (UAS) Operational Approval, section 8.h, January 22, 2013.

States. Further, many state legislatures and local municipalities have considered or are considering, and some have passed, legislation limiting the use of UAS by law enforcement. For example, at least three states require law enforcement to obtain a search warrant before using a UAS for surveillance and one state has imposed a 2-year moratorium on UAS use except in the cases of imminent loss of life.<sup>11</sup>

In September 2012, the Government Accountability Office (GAO) found that federal agencies as a whole have not addressed important UAS privacy concerns, specifically how data captured by UAS will be used and protected by federal law enforcement agencies. The report stated that by not working proactively to address these issues, federal agencies, including DOJ, risk further delaying the integration of UAS into the national airspace system. GAO recommended that DOJ, along with the U.S. Department of Homeland Security (DHS), initiate discussions with the FAA to explore whether actions should be taken to guide the collection and use of UAS-acquired data. We found that, as of May 2013, DOJ had not taken steps to address this recommendation.

## Status of DOJ UAS Law Enforcement Programs

From 2004 to May 2013, DOJ law enforcement components reported spending in total approximately \$3.7 million on small UAS.<sup>13</sup> Specifically, the FBI spent over \$3 million on UAS (or over 80 percent of the total DOJ amount spent on UAS), while the ATF spent almost \$600,000, the USMS spent \$75,000, and the DEA acquired UAS from another federal agency for testing at no cost. As of May 2013, the FBI and ATF had active UAS

The states of Florida, Idaho, and Tennessee require that law enforcement agencies obtain a search warrant before using UAS for surveillance. In April 2013, the Commonwealth of Virginia enacted a 2-year moratorium on UAS use except in cases of imminent loss of life. There are many other state legislatures and municipalities that are considering proposed bills, and therefore, state and local laws in this area change frequently.

<sup>&</sup>lt;sup>12</sup> U.S. Government Accountability Office, Unmanned Aircraft Systems: Measuring Progress and Addressing Potential Privacy Concerns Would Facilitate Integration into the National Airspace System, GAO-12-981 (September 2012).

Total expenditures associated with UAS acquisition include costs for: (1) the vehicle(s); (2) mission payloads; (3) ground control station; (4) control and data links; and (5) manufacturer-provided training.

programs, while the DEA and USMS stated that they have no plans to use UAS.<sup>14</sup>

# Active UAS Programs

The FBI has been deploying UAS to support their operations since 2006. ATF began researching and testing UAS in 2011 and told us that it is ready to deploy them if necessary through emergency COAs. According to officials in both components, UAS offer unique law enforcement capabilities required by their investigations. For example, UAS operators told us that UAS video and imagery equipment augment reconnaissance and surveillance assignments, tactical operations, and crime scene examinations. Furthermore, officials told us UAS can be a useful and time-saving tool for missing persons cases and in disaster situations. DOJ officials told us that none of their UAS are armed or carry releasable projectiles.

As of May 2013, both the FBI and ATF had established program offices responsible for maintaining and securing UAS. The program offices also ensure that UAS are readily deployable for training or support missions. Both have implemented component-level procedures guiding how to approve and track internal requests for UAS support in the field. Specifically, both components require that special agents first obtain approval for surveillance from a supervisor and submit a written request to the component-level UAS program office. If the program office approves the request, it must then obtain an appropriate emergency COA or other FAA approval prior to deploying the UAS.

The FBI reported that it had used UAS in very limited circumstances to support operations where there was a specific operational need. For example, the FBI used a UAS in January 2013 during a hostage crisis in Midland City, Alabama. We reviewed available records at the FBI and ATF pertaining to UAS training conducted by both components and the operational missions conducted by the FBI under these procedures. We found that, based on these records, the FBI and ATF appeared to operate UAS only after obtaining the required approvals, including FAA-approved COAs or emergency COAs.

<sup>&</sup>lt;sup>14</sup> In addition to DOJ's internal UAS use, DHS has reported that it has operated its UAS on two occasions to assist DOJ law enforcement components.

## Inactive UAS

Officials at DEA and USMS stated that they had obtained UAS for testing, but due to UAS regulatory limitations (such as the prohibition on flights near airports and in densely populated areas) as well as mechanical limitations (such as limited battery life and data link range), they did not believe UAS provided an additional benefit to their missions. As a result, these components have decided not to deploy UAS in support of operations. The DEA stated that it plans to transfer its unused UAS to the DHS while the USMS stated that it plans to excess the UAS by destruction because its UAS are obsolete and no longer operable.

## **Need for DOJ UAS-Specific Policies**

The FBI and ATF have developed or are developing their own standard operating procedures governing UAS. We obtained copies of these procedures and found that they define specific roles and responsibilities for the UAS flight team. <sup>16</sup> In addition, the procedures provide pre- and post-flight instructions that outline what the flight team should do prior to and after flight. Both procedures require that the flight team receive approval from officials responsible for completing COAs and notify the FAA of the flight.

With regard to potential privacy concerns stemming from UAS operations, officials at both the FBI and ATF stated that they did not believe there was any practical difference between how a UAS collects evidence as compared to a manned aircraft. The FBI stated that the aerial surveillance provisions of its Domestic Investigations and Operations Guide and other aviation policies govern how agents use UAS.<sup>17</sup> These guidelines require that agents request supervisory approval before conducting any aerial surveillance and comply with aviation laws and policies. As of May 2013, the ATF stated that it was developing a standard operational checklist to guide how pilots should conduct UAS flights. As such, these officials did not

Some UAS models require that operators be as close as a mile from the device during operation and that current FAA regulations generally exclude UAS operations in most urban areas.

<sup>&</sup>lt;sup>16</sup> At a minimum, the FAA requires that UAS flight teams must be comprised of a certified pilot and an observer.

According to the FBI, in early June 2013, it began developing and reviewing an Aviation Policy Implementation Guide. In addition, the FBI reported that its Office of the General Counsel is also conducting a privacy review of the use of UAS.

believe that there was a need to develop additional privacy protocols for UAS.

Considering the low operational cost of UAS compared to manned aircraft, privacy advocates have expressed concern that non-emergency UAS use could quickly transform into routine or broader evidence-gathering activities. Moreover, the International Association of Chiefs of Police (IACP) has encouraged law enforcement agencies to implement UAS-specific policies and procedures to address privacy concerns as a way to increase public support for UAS use. In August 2012, the IACP published a report entitled *Recommended Guidelines for the Use of Unmanned Aircraft* for law enforcement agencies that are contemplating using UAS. An IACP official told us that it developed the guidelines in part to balance the enhanced surveillance capabilities of UAS with privacy concerns. The IACP report included 10 key recommendations for law enforcement agencies to consider as a basis for enhancing their own UAS operational internal controls and image retention policies. These IACP recommendations are shown in Exhibit 1.

# EXHIBIT 1: IACP RECOMMENDED GUIDELINES FOR UAS OPERATIONAL CONTROLS AND IMAGE RETENTION

- 1. Obtain a COA as necessary from the FAA before operating a UAS.
- 2. UAS may only be operated by trained and certified personnel. Such personnel also receive training in proper use of UAS.
- 3. All UAS flights should be (1) approved by a supervisor and (2) for a legitimate public safety mission, training, or demonstration purpose.
- 4. The purposes, times, and supervisory approvals of all UAS flights will be documented.
- 5. A supervisory or third-party review of UAS documents at regular intervals and document review results to ensure compliance with agency UAS procedures.
- 6. Defined consequences for employees who use UAS outside of agency policies.
- 7. Except in cases where officer safety might be jeopardized, agencies should notify people in the vicinity of UAS flights to enhance public safety and assistance.
- 8. Obtain a search warrant prior to flight when the UAS will be used to collect evidence of criminal wrongdoing and if the operating UAS will intrude upon reasonable expectations of privacy.
- 9. Images captured by UAS should not be retained unless required for evidence of a crime, an on-going investigation, training, or required by law.
- 10. Retained images should be available for public inspection unless exempt by law.

Source: IACP Recommended Guidelines for the Use of Unmanned Aircraft, August 2012, as summarized by OIG.

As suggested by the IACP guidelines, the surveillance policy the FBI has applied to UAS requires the FBI to obtain a warrant if the surveillance would intrude on an individual's reasonable expectation of privacy, consistent with Fourth Amendment protections against unreasonable search and seizure. In finalizing its UAS guidelines, ATF has told us that it plans to apply the same warrant threshold to UAS as to any other investigation.

A consistent policy specific to UAS, however, may be merited in light of the trending technological capabilities of UAS in order to guide their proper and safe use in circumstances unanticipated by existing policies. For example, although investigators generally do not need to obtain search warrants for surveillance of areas outside of a home, the area surrounding a residence, called the curtilage, presents a possible exception. The unique capability of small UAS to maneuver effectively yet covertly in the curtilage distinguishes such devices from manned aircraft. When DOJ law enforcement components use UAS to perform surveillance in areas where individual expectations of privacy are not clear or well-defined, more explicit guidelines specific to UAS could provide appropriate protection of individual privacy interests and ensure the admissibility of UAS-acquired evidence in court proceedings.

Similarly, as power systems for UAS improve, UAS surveillance will be capable of extended flight times of several hours or even days at a time, far beyond the capabilities of manned aircraft. Such a capability could permit law enforcement to conduct pervasive tracking of an individual's movements, which could have legal implications whether the tracking was performed on private or public property.<sup>19</sup>

Law enforcement is required to consider four factors to ascertain whether activity occurring in the curtilage constitutes a search and therefore requires a warrant: (1) the proximity of the area to the home, (2) whether the area is within an enclosure surrounding the home, (3) the nature of the use to which the area is put, and (4) any steps taken to protect the area from observations from passers-by. See *United States v. Dunn*, 480 U.S. 294, 301 (1987).

The U.S. Supreme Court held in 2012 that a law enforcement agency's installation of a global positioning system (GPS) on a vehicle and its use of the GPS to monitor the vehicle's movements constituted a search and therefore required that the law enforcement agency obtain a warrant to engage in such monitoring. See *United States v. Jones*, 565 U.S. \_\_\_\_, 132 S. Ct. 945 (2012). In addition, while not the holding of the Court, concurring opinions in this case expressed the view that monitoring or surveillance of a person's movements by GPS, even while the person is in public, may impinge on societal expectations of privacy.

The FBI has been and is currently using UAS and is drafting component-level UAS policies. In addition, although the ATF is not yet using UAS, it has taken steps towards using them, including contacting the FAA to obtain COAs. Moreover, we learned that the National Institute of Justice (NIJ) in the Office of Justice Programs (OJP) has been working with the FAA to expand state and local law enforcement UAS use over a wider-number of areas.

We believe the Office of the Deputy Attorney General (ODAG), which has responsibility within DOJ for formulating cross-component law enforcement policies, should consider the need for a DOJ-wide policy regarding UAS use in areas and ways that could have significant privacy or other legal implications. We therefore recommend that ODAG convene a working group comprised of DOJ components using or with an interest in using UAS to: (1) determine whether UAS capabilities are sufficiently distinct from those of manned aircraft that they require a specific DOJ-level policy to address privacy and legal concerns; and (2) identify and address UAS policy concerns that are shared across components or require coordination among components and other federal agencies. We believe that any such working group should include the DOJ Office of Privacy and Civil Liberties, which is responsible for developing legal guidance to help ensure compliance with privacy laws, regulations, and policies.

Further, we believe DOJ needs to promptly address the September 2012 GAO report recommendation that DOJ explore with the FAA and DHS whether actions should be taken to guide the collection and use of UAS-acquired data. We found that as of May 2013, DOJ had not taken steps to address this recommendation. By contrast, since 2009 and at the direction of Congress, the FAA and the Department of Defense have convened a task force with other federal agencies referred to as the UAS Executive Committee. As of May 2013, DOJ was not a member of this committee. We recommend that ODAG consider whether to solicit DOJ's admission to this committee so that DOJ can be involved in formal discussions with other Executive Branch agencies regarding UAS issues.

Congress mandated the Department of Defense and Department of Transportation develop a plan for expanded access into the national airspace for UAS in consultation with DHS. Pub. L. No. 111-84,  $\S$  935 (2009). The result of this legislation was the formation of the Executive Committee.

# **DOJ UAS Grant and Cooperative Agreement Awards**

As of May 2013, two DOJ components – OJP and COPS – have made awards to at least seven local police departments and non-profit organizations that in part supported UAS acquisition, research, and deployment. Within OJP, two separate bureaus had made awards involving UAS: the Bureau of Justice Assistance (BJA) and the National Institute of Justice (NIJ). As shown by Exhibit 2, the seven award recipients reported spending \$1.2 million to purchase, research, and test UAS, or almost 5 percent of the total \$27 million provided by these awards.<sup>21</sup>

Some of the awards funded additional research or law enforcement initiatives. For example, the Gadsden Police Department's award was part of COPS' 2007 national antimethamphetamine initiative and Eastern Kentucky University's award also supported additional law enforcement initiatives in rural areas of which UAS constituted a small part.

**EXHIBIT 2: IDENTIFIED DOJ UAS AWARDS, 2001-2013** 

Awarding Component	Recipient	Award Period	Award Type	Total Award (\$)	Estimated UAS- Related Costs* (\$)
OJP/NIJ	Eastern Kentucky University, Richmond, Kentucky	7/2001 to 2/2008	Cooperative Agreement	13,306,560	200,000
OJP/NIJ	The Sheriffs' Association of Texas, Austin, Texas**	7/2006 to 9/2011	Cooperative Agreement	5,244,642	405,000
OJP/NIJ	The Center for Rural Development, Hazard, Kentucky	10/2009 to 9/2013	Cooperative Agreement	7,220,614	280,000
COPS	Gadsden (Alabama) Police Department	9/2007 to 2/2011	Grant	446,165	150,000
ОЈР/ВЈА	Miami-Dade (Florida) Police Department	9/2007 to 8/2009	Grant	150,000	150,000
ОЈР/ВЈА	North Little Rock (Arkansas) Police Department	10/2007 to 12/2009	Grant	330,000	84,334
OJP/BJA	San Mateo County (California) Sheriff's Office	9/2007 to 8/2009	Grant	150,000	N/A***
		\$26,847,981	\$1,269,334		

Source: OJP, COPS, and award recipients Notes:

UAS-related costs are estimated based on approved budgets or reports from the awarding agency or award recipient. UAS purchases may have comprised only a part of the award recipient's total UAS program costs and the reported expenditures may also include training, travel, and other program-related support costs.

The Sheriffs' Association of Texas received two awards under different funding

initiatives.

San Mateo County Sheriff's Office's UAS award was deobligated and not used to purchase a UAS or otherwise support UAS activities.

We note that OJP appeared to have difficulty identifying the above BJA UAS awards. When we initially spoke with OJP officials, they told us BJA had not funded UAS. However, our review of FAA-approved COAs, public source information, and contacts with local police department officials identified the awards to the police departments of Miami-Dade County, Florida and North Little Rock, Arkansas. Only after notifying OJP and BJA of this information was BJA able to confirm these UAS awards. Four months after our initial UAS award inquiry, OJP identified another BJA grant that was made in 2007 to the San Mateo County (California) Sheriff's Office solely for the purchase of a UAS. BJA stated it did not initially identify these awards because it had only searched its largest grant program for UAS awards. In addition, BJA

did not use a standardized term for UAS technology that would quickly identify all UAS awards in its Grants Management System. As a result, we believe we cannot rule out the possibility that additional awardees may have been provided DOJ funds to acquire or deploy UAS. We therefore recommend that OJP assess and enhance its ability to track UAS-related awards to ensure that it can readily identify how DOJ award funds have been used to support UAS technology.

Although COPS reports that it does not plan to award funds to state and local police for UAS acquisition, it has announced a \$250,000 award to develop UAS surveillance guidelines to assist local law enforcement agencies. This COPS-funded initiative will use focus groups to examine the benefits and challenges of local law enforcement use of UAS. COPS intends that the final deliverable for this award will be a toolkit or guidebook that local law enforcement agencies can use to implement their UAS programs. Because it also has plans to provide at least one future UAS-related award, we recommend that COPS review its award tracking system to ensure that this and any other future UAS award will be tracked accurately and expeditiously.

## Grants to Local Law Enforcement Agencies

According to DOJ award documents, the purpose of the Gadsden, Alabama and the North Little Rock, Arkansas grants was to help fund larger DOJ-supported crime initiatives and UAS acquisition was not a disallowed cost under the terms of the awards. The awards to Miami-Dade, Florida, and San Mateo, California, were provided solely to purchase and evaluate UAS for use in the field. We spoke to officials at these local police departments to discuss how the UAS they acquired helped to further the respective purpose of each grant.

Gadsden Police Department spent \$150,000 on UAS-related costs with funds from a 2007 COPS grant to enhance community policing efforts focused on stopping the spread of methamphetamine. In 2009, it attempted to use the UAS to perform one surveillance mission. However, Gadsden Police Department officials stated that during the mission the ground control station lost communication with the UAS, causing the UAS to collide with a tree. Officials told us that they believe that the rugged topography (hills and valleys) of the mission area led to the communication problem. According to

The solicitation was open to all public government agencies, profit and nonprofit institutions, universities, community groups, and faith-based organizations. COPS anticipates making an award by September 2013.

the FAA, the Gadsden Police Department did not obtain the required COA prior to its mission. The Gadsden Police Department reports that it has kept the UAS in a secured storage facility since that time, and that it has yet to determine whether or how it will use its UAS in the future.

An official with the North Little Rock Police Department stated that it spent \$84,000 to purchase a UAS in 2008 from a BJA grant specifically to perform aerial surveillance over high-risk drug and gun crime areas. The BJA approved the UAS purchase as part of a larger award for other equipment (such as software and communications devices). North Little Rock received a training COA and began testing the device over a limited area just outside of their jurisdiction. A North Little Rock official told us that, as of May 2013, the UAS had not been used for law enforcement-related activities, but North Little Rock Police Department is evaluating the use of UAS technology for future surveillance.

In September 2007, the Miami-Dade Police Department and the San Mateo County Sheriff's Office each received a BJA grant for \$150,000 with the sole purpose of purchasing a UAS. Both of these were non-competitive awards directed by the Office of the Assistant Attorney General for OJP. The objective of both awards was to test how local law enforcement agencies could use UAS to address high-risk situations in heavily populated areas. Miami-Dade officials confirmed that they used the award to purchase and test the UAS. After the award period ended, Miami-Dade received an operational COA from the FAA to use the UAS only within a defined perimeter of a crime scene, such as a hostage crisis. However, as of May 2013, Miami-Dade reports it has not used the UAS operationally. With regard to the award to San Mateo County Sheriff's Office, we found that BJA subsequently deobligated the funds because the recipient decided not to purchase a UAS.

Cooperative Agreements with Non-Profit Organizations

The NIJ is a research, development, and evaluation branch for DOJ. The NIJ's Office of Science and Technology has established an Aviation Technology Program in part to research and evaluate UAS.<sup>23</sup> As discussed below, since 2003, the NIJ has established cooperative agreements for UAS

In addition to researching UAS, the Aviation Technology Program is also responsible for determining whether lower cost aircraft can cost effectively enhance law enforcement work, evaluating operational aspects of low cost aircraft, and identifying and developing new aviation technology.

research with three non-profit organizations.<sup>24</sup> An objective of each agreement was to assess how UAS, as low-cost aviation alternatives, could be used by smaller non-federal law enforcement agencies.

In 2003, NIJ provided a supplement to an earlier cooperative agreement with Eastern Kentucky University in Richmond, Kentucky, to begin evaluating the feasibility of unmanned aerial technology use by rural law enforcement. The NIJ estimates that the university spent \$200,000 on UAS-related costs working with other institutions to develop an early UAS prototype and software to control the UAS, and performed limited field testing. The agreement with Eastern Kentucky University ended in February 2008 and, as of May 2013, the most recent NIJ UAS awardee, the Center for Rural Development (the Center) in Somerset, Kentucky, has custody of the UAS prototype developed under this award.

In 2006 and 2009, the NIJ awarded cooperative agreements to the Sheriffs' Association of Texas (Sheriffs' Association) to evaluate different types of low-cost aviation technologies. Under these agreements, the NIJ estimates that the Sheriffs' Association spent \$405,000 on UAS-related costs. The Sheriffs' Association served as a repository for different types of manned and unmanned aviation equipment – including a small UAS – so that local law enforcement agencies could receive and test the equipment. The agreement with the Sheriffs' Association ended in September 2011. As discussed below, the Sheriffs' Association transferred the UAS to the Center.

In 2011, the NIJ amended a larger 2009 cooperative agreement with the Center to include evaluating low-cost aviation solutions for local law enforcement agencies. The NIJ estimates that the Center spent \$280,000 on UAS-related costs. The agreement also supported UAS training and demonstrations using the UAS assets transferred from prior NIJ UAS award recipients Eastern Kentucky University and the Sheriffs' Association. Additionally, the Center has helped the NIJ test and demonstrate a DHS UAS with the Queen Anne's County Office of the Sheriff in Grasonville, Maryland.<sup>25</sup>

According to OJP, cooperative agreements are distinct from grants in that cooperative agreements are used whenever the awarding agency intends to be substantially involved with the recipient during performance of the supported activity.

The NIJ has received three UAS from DHS at no cost. The additional UAS models have been tested at the Naval Air Station Patuxent River in Maryland. Because these UAS were operated in military airspace, no COAs were required. The NIJ returned one UAS to DHS and plans to transfer the other UAS to two state and local law enforcement agencies.

The Center has also worked with the NIJ to negotiate an agreement with the FAA to streamline the state and local law enforcement agency COA process. Under the agreement, the requesting agency will still need to demonstrate that it will operate the UAS safely and proficiently. However, after receiving an operational COA, state and local law enforcement agencies will be able to deploy UAS throughout their jurisdiction quickly without additional FAA approvals. Furthermore, the NIJ will establish a process by which it will collect and share UAS training and operational mission data by law enforcement. The FAA and NIJ signed this agreement in March 2013. The NIJ expects that this agreement will help expedite the COA application process and the FAA anticipates increased UAS use by law enforcement.

## **Need for Enhanced Coordination and Oversight of UAS Awards**

Like other DOJ grant recipients, the UAS awardees were subject to general administrative and financial requirements, such as the submission of semi-annual performance activity reports. COPS and BJA officials stated that its awards largely pre-dated the significant public interest in domestic UAS use and therefore both components treated UAS purchases in the same manner as they would have treated the purchase of other law enforcement equipment. The objectives of the UAS awards did not require that recipients report the type of UAS models acquired, how many times and when they used or tested UAS, any problems encountered during operation, what type of data was collected, how collected data was safeguarded and used, or other similarly specific information pertaining to UAS operations and testing. Without requiring the reporting of such information, neither COPS nor OJP was positioned to acquire uniform UAS data needed to identify specific issues local law enforcement may encounter while using UAS funded through current or future grant awards. Therefore, we recommend that OJP and COPS establish enhanced reporting requirements and use reported information to measure the effectiveness of their UAS awards. These enhancements could include information such as: (1) the specific UAS models acquired, (2) the frequency and manner with which the recipient used or tested UAS, (3) what type of data was collected by UAS and whether the recipient had UAS-specific policies, (4) how collected data was used in an investigation and subsequently safeguarded, and (5) other concerns or best practices identified by the recipient that pertain to UAS operations and testing.

Moreover, we found that the UAS awards did not stipulate prerequisites necessary to ensure proper controls over the use of DOJ funds, such as requiring that recipients receive COAs or confirm that UAS use was legal in their jurisdiction. Without such controls, we believe there is a risk that applying agencies may receive UAS awards, but will be unable to use a

UAS. If the recipient is unable to obtain a COA or cannot legally operate a UAS, taxpayer funds used to purchase it are wasted as the UAS remains in storage and becomes obsolete. Accordingly, we recommend that OJP and COPS require that grant applicants demonstrate that they can meet the necessary prerequisites to become authorized to operate a UAS.

In December 2012, BJA and COPS entered into a Memorandum of Understanding to improve collaboration and information sharing for FY 2012 grants. The memorandum notes that both agencies make awards to the same group of recipients (state and local law enforcement agencies) and emphasizes the importance that BJA and COPS work together to mitigate the risk of making duplicative or unnecessary awards. The memorandum establishes a meeting calendar for BJA and COPS to identify and discuss related award projects and solicitations. BJA and COPS both report that UAS awards are a topic about which they are coordinating under this agreement.

We note, however, that the December 2012 agreement does not explicitly include NIJ as a member of this collaborative effort. While BJA has provided documents to us that evidence that NIJ has participated in grant coordination meetings, to mitigate the risk of wasting taxpayer funds by performing unnecessarily redundant UAS testing and policy development, we believe that the memorandum should be updated to formalize NIJ's participation. NIJ's formal involvement will also help facilitate cooperation between grant recipients testing UAS. We therefore recommend that OJP and COPS update the December 2012 award coordination memorandum to ensure that NIJ is included as a participant in UAS award coordination efforts.

Although UAS supported by DOJ award funds may have the potential to assist federal law enforcement surveillance efforts, it is also possible that the uncoordinated use of local UAS could interfere with federal surveillance. For example, there exists a risk that a local law enforcement agency could use a DOJ-funded UAS in a way that could inadvertently make a subject of federal monitoring aware that they are under surveillance. We found no evidence that OJP or COPS coordinated with or notified DOJ law enforcement components (FBI, DEA, USMS, and ATF) about UAS awards, either before or after the awards were made.<sup>26</sup> Providing notice to relevant federal law enforcement personnel that DOJ-funded UAS will be available in their locations will afford DOJ law enforcement components the knowledge of the

<sup>&</sup>lt;sup>26</sup> According to USMS, personnel in its Eastern District of Arkansas office became aware that North Little Rock had received a UAS, but not as a result of coordination with OJP.

UAS' existence, thereby affording opportunities to coordinate the use of the UAS and avoid potential conflicts.

Enhanced coordination would also provide an important opportunity for OJP and COPS to keep DOJ law enforcement components aware of DOJ-funded UAS activity at the local police department level. We therefore recommend that OJP and COPS notify the FBI, ATF, DEA, and USMS of future UAS awards and work with these components to identify and share relevant data derived from UAS projects funded with DOJ awards. Such an initiative should leverage NIJ's responsibility to collect similar UAS data under the March 2013 COA agreement with the FAA, allow components to share their expertise with UAS award recipients, and provide a venue for DOJ to receive feedback on law enforcement needs to ensure that DOJ-funded local use of UAS does not affect ongoing DOJ law enforcement initiatives.

#### Recommendations

#### We recommend that ODAG:

- 1. Convene a working group comprised of DOJ components using or with an interest in using UAS to: (1) determine whether UAS capabilities are sufficiently distinct from those of manned aircraft that they require a specific DOJ-level policy to address privacy and legal concerns; and (2) identify and address UAS policy concerns that are shared across components or require coordination among components and other federal agencies.
- 2. Consider whether to solicit DOJ's admission to the UAS Executive Committee so that DOJ can be involved in formal discussions with other Executive Branch agencies regarding UAS issues.

#### We recommend that OJP:

3. Assess and enhance its ability to track UAS-related awards to ensure that it can readily identify how DOJ award funds have been used to support UAS technology.

#### We recommend that COPS:

4. Review its award tracking system to ensure that this and any other future UAS award will be tracked accurately and expeditiously.

#### We recommend that OJP and COPS:

- 5. Establish enhanced reporting requirements and use reported information to measure the effectiveness of their UAS awards.
- 6. Require that grant applicants demonstrate that they can meet the prerequisites necessary to become authorized to operate a UAS.
- 7. Update the December 2012 award coordination memorandum to ensure that NIJ is included as a participant in UAS award coordination efforts.
- 8. Notify the FBI, ATF, DEA, and USMS of future UAS awards and work with these components to identify and share relevant data derived from UAS projects funded with DOJ awards.

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